

What is claimed is

1. An image reading apparatus comprising:

an image input unit for generating an analog image
signal corresponding to optical density information of an
5 original;

an A/D converter for converting the analog image signal
inputted from the image input unit into a digital image
signal;

an image processor for generating a primary control
10 signal and for executing an image process operating based
on the digital image signal inputted from the A/D converter;

a controller for generating a secondary control signal
from the primary control signal for controlling the image
input unit based on the generated secondary control signal,
15 a pulse width of the secondary control signal being shorter
than a pulse width of the primary signal; and

a wiring member for electrically connecting the image
processor to the controller for transmitting the primary
control signal therethrough.

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2. The image reading apparatus according to claim 1,
wherein

the image input unit and the controller are provided

in a carriage which is reciprocated in parallel to a surface of the original, and

the image processor is provided in a case which supporting the carriage so as to allow the reciprocation
5 motion of the carriage.

3. The image reading apparatus according to claim 2, wherein

the controller generates a sampling signal in
10 synchronism with the secondary control signal from the primary control signal,

the A/D converter is provided in the carriage and converts the analog image signal into the digital image signal by using the sampling signal, and

15 the wiring member transmits the digital image signal.

4. The image reading apparatus according to claim 1, wherein the controller includes a PLL circuit.

20 5. The image reading apparatus according to claim 2, wherein the wiring member has flexibility for allowing the reciprocation motion of the carriage.

